

10th Class 2015

Physics	Group-II	
Time: 15 Minutes	(Objective Type)	Max. Marks: 12

Note: Four possible answers A, B, C and D to each question are given. The choice which you think is correct, fill that circle in front of that question with Marker or Pen ink. Cutting or filling two or more circles will result in zero mark in that question.

1-1- 1 kB = :

- (a) 1024 Byte ✓ (b) 1024 kB
(c) 1024 MB (d) None of these

2- Half life of carbon-14 in years is:

- (a) 5730 years ✓ (b) 5740 years
(c) 5750 years (d) 5760 years

3- The process by which electrons are emitted by a hot metal surface is known as:

- (a) Boiling (b) Evaporation
(c) Conduction (d) Thermionic emission ✓

4- The formula for time period of mass spring system is:

- (a) $T = 2\pi \sqrt{\frac{m}{k}}$ ✓ (b) $T = 2\pi \sqrt{\frac{l}{g}}$
(c) $T = 2\pi \sqrt{\frac{k}{m}}$ (d) $T = 2\pi \sqrt{\frac{g}{l}}$

5- The formula for focal length is:

- (a) $f = \frac{R}{2}$ ✓ (b) $f = \frac{R}{4}$
(c) $f = \frac{R}{3}$ (d) $f = \frac{R}{5}$

- 6- Capacitance is defined as:
- (a) VC (b) $\frac{Q}{V}$ ✓
(c) QV (d) $\frac{V}{Q}$
- 7- Michael Faraday belonged to:
- (a) British ✓ (b) U.S.A.
(c) K.S.A. (d) Russia
- 8- Radio waves are:
- (a) Longitudinal waves
(b) Transverse waves
(c) Electromagnetic waves ✓
(d) All of these
- 9- Which one of the following is a method of energy transfer:
- (a) Conduction (b) Radiation
(c) Wave motion (d) All of these ✓
- 10- S.I unit of resistance is:
- (a) Volt (b) Ampere
(c) Ohm ✓ (d) Joule
- 11- Electroscope is used for detecting:
- (a) Current (b) Charge ✓
(c) Voltage (d) Resistance
- 12- The speed of sound at 0°C is:
- (a) 386 ms^{-1} (b) 376 ms^{-1}
(c) 231 ms^{-1} (d) 331 ms^{-1} ✓